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WILLIAMS, MARK A	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES H. MABE

Appeal 2009-006014
Application 10/796,806
Technology Center 3600

Decided: February 24, 2010

Before: JENNIFER D. BAHR, MICHAEL W. O'NEILL, *and* KEN B. BARRETT, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

James H. Mabe (Appellant) appeals under 35 U.S.C. § 134 (2002) from the Examiner's decision rejecting claims 35-45. Claims 1-34 have been cancelled. We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

The Invention

Appellant's claimed invention is directed to a hinge actuated by a two-way shape memory alloy (SMA). Spec., para. 0002.

Claim 35, reproduced below, is illustrative of the claimed invention.

> 35. A piano hinge defining a hinge line, the piano hinge comprising a two-way shape memory alloy (SMA) positioned along the hinge line to form a pin that at least partially twists when the two-way SMA pin changes between an austenite temperature and a martensite temperature, first and second hinge leafs defining a passage into which the two-way SMA pin fits, and a key-spline arrangement rigidly securing each respective end portion of the two-way SMA pin to the first and second hinge leafs respectively to provide for transfer of torque in both clockwise and counterclockwise directions from the two-way SMA pin to one of the hinge leafs relative to the other of said hinge leafs, whereby the piano hinge leafs do not pivot about the SMA pin but pivot when a torque is applied in response to the two-way SMA pin twisting as the temperature of the two-way SMA pin changes between the austenite temperature to the martensite temperature.

The Rejections

The Examiner relies upon the following as evidence of unpatentability:

Nishino[1]	JP 8-228910	Sep. 10, 1996
Perret, Jr.	US 5,617,377	Apr. 1, 1997

Appellant seeks review of the Examiner's rejections under 35 U.S.C. § 112, second paragraph, of claims 35-45 as indefinite; under § 102(b) of claims 35 and 36 as being anticipated by Nishino[2]; and under § 103(a) of claims 41-43 and 45 as unpatentable over Nishino and Perret, Jr.[3], and of claims 37-40 and 44 as unpatentable over Nishino.

SUMMARY OF DECISION

We AFFIRM.

ISSUE

Independent claims 35 and 41 require a hinge with a two-way SMA pin, wherein the "hinge leafs do not pivot about the SMA pin but pivot when a torque is applied in response to the two-way SMA pin twisting as the temperature of the two-way SMA pin changes." The Examiner concluded that these claims are ambiguous because it is unclear how the hinge leaves on one hand cannot pivot about the pin yet on the other hand can pivot about the pin. Ans. 4. Appellant argues that the hinge leaves do not "freely" pivot, but only pivot in response to the SMA pin twisting. Appeal Br. 6.

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[1] The Examiner and Appellant refer to this Japanese patent application as "JP 408228910 A" or "JP '910."

[2] Appellant identifies claims 41-43 and 45 as rejected under an anticipation rejection. Appeal Br. 5. However, the Examiner rejected these claims as unpatentable over Nishino and Perret, Jr. in an obviousness rejection. Ans. 6-7.

[3] Appellant addresses the obviousness rejections together. Appeal Br. 5, 10-11.

The Examiner further concluded that claims 41-45 are indefinite on the basis that the limitation "NiTinol" is a trademark, as evidenced by the Appellant's use of the term in the Appeal Brief. Ans. 4-5; Appeal Br. 11 (referring to "NiTinol" as "NITINOL®"). Appellant does not contest this conclusion.

Therefore, the dispositive issue is whether the language alluded to by the Examiner renders claims 35 and 41 indefinite.

OPINION

Appellant argues that the hinge leaves do not "freely" pivot, but only pivot in response to the SMA pin twisting. Appeal Br. 6. However, the Appellant's proffered explanation is not commensurate with the claim language, and does not clarify the metes and bounds of the limitation requiring that the hinge leaves "do not pivot … but pivot." It is impossible to give weight to both the "do not pivot" limitation and "but pivot" limitation. *See Bicon Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006) ("claims are interpreted with an eye toward giving effect to all terms in the claim."); *Stumbo v. Eastman Outdoors, Inc.*, 508 F.3d 1358, 1362 (Fed. Cir. 2007) (denouncing claim constructions that render phrases in claims superfluous). Therefore, claims 35 and 41 are insolubly ambiguous. *See Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001) (a claim is indefinite if it is "insolubly ambiguous" and not "amenable to construction").

The prior art rejections must fall because they are necessarily based on a speculative assumption as to the meaning of the claims. *See In re Steele*, 305 F.2d 859, 862-63 (CCPA 1962). It should be understood,

however, that our decision in this regard is based solely on the indefiniteness of the claimed subject matter, and does not reflect on the adequacy of the prior art evidence applied in support of the rejection.

Furthermore, the Examiner concluded that claims 41-45 are indefinite for the additional reason that the Appellant appears to use a trademark as a claim limitation. Ans. 4-5. Appellant did not present any argument contesting this conclusion.

CONCLUSION

Claims 35-45 are indefinite because the metes and bounds of the "hinge leafs" that "do not pivot … but pivot" is insolubly ambiguous. Accordingly, we sustain the Examiner's rejection of claims 35-45 as indefinite. We do not sustain the Examiner's prior art rejections of claims 35-45 because they are necessarily based on a speculative assumption as to the meaning of the claims.

DECISION

The Examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

hh

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